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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/618,876

07/19/00

ROSENFLANZ

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55763USA3A

EXAMINER

IM52/0829

MARCHESCHI, M	
ART UNIT	PAPER NUMBER

ATTN GREGORY D ALLEN
OFFICE OF INTELLECTUAL PROPERTY COUNSEL
3M INNOVATIVE PROPERTIES COMPANY
P O BOX 33427
ST PAUL MN 55133-3427

1755

DATE MAILED:

08/29/01

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No. 09/618,876	Applicant(s) ROSENFLANZ, ANATOLY Z.	
	Examiner Michael A Marcheschi	Art Unit 1755	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-80 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-80 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claims ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- | | |
|---|--|
| 15) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 18) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____. |
| 16) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 19) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 17) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2,6,7</u> . | 20) <input type="checkbox"/> Other: |

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The amendment filed 12/28/00 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

The amendment to page 41, lines 21-22 which changed the width of the phases in figure 9 from "up to about 1 micrometer" to "up to about 2 micrometers" is new matter because the specification does not provide support for this. Applicant states that support for this amendment can be found in figure 9. The examiner **fails** to see how this figure provides support for this amendment.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claims 1-80 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 29 are indefinite as to the phrase "volume of said particle, eutectic material" because this phrase appears to be incomplete. This should be changed to "volume of said particle, of a eutectic material".

Claims 7, 8, 20, 26 and 32 are indefinite as to the phrase "are, on average, up to" since the examiner is unclear as to what this encompasses, thus rendering the scope of the claims unclear. What does this mean? The phrase "on average" should be canceled.

Claim 12 is indefinite because the examiner is unclear as to what "cations" encompasses, thus rendering the scope of the claim unclear

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Claim 13 is indefinite because line 2 of the claim, specifically the phrase "a portion of said complex $\text{Al}_2\text{O}_3\text{-Y}_2\text{O}_3$ Al cations are substituted", is not defined in a clear and concise manner, thus rendering the scope of the claim unclear. What is applicant defining? Is applicant stating that a portion of the Al cations in this complex are substituted by the additional cation? If so, the claim should reflect this (i.e. **wherein a portion of the Al cations in the complex $\text{Al}_2\text{O}_3\text{-Y}_2\text{O}_3$ are substituted...**).

Claims 14-15 are indefinite because line 2 of the claim, specifically the phrase "a portion of said complex $\text{Al}_2\text{O}_3\text{-Y}_2\text{O}_3$ Y cations are substituted", is not defined in a clear and concise manner, thus rendering the scope of the claims unclear. What is applicant defining? Is applicant stating that a portion of the Y in this complex are substituted by the additional cation? If so, the claims should reflect this (i.e. **wherein a portion of the Y cations in the complex $\text{Al}_2\text{O}_3\text{-Y}_2\text{O}_3$ are substituted...**).

Claims 36, 39, 41, 44, 46, 52, 53, 59, 61, 67, 69 and 72 are indefinite as to the phrase "volume of the respective particle, eutectic material" because this phrase appears to be incomplete. This should be changed to "volume of the respective particle, of a eutectic material

Claims 41 and 44 are also indefinite as to the phrase "specified nominal grade" because the examiner is unclear as to what this encompasses, thus rendering the scope of the claims unclear.

Claims 46 and 52 are indefinite as to the converting step because the examiner is unclear as to how this is accomplished, thus rendering the scope of the claims unclear.

The other claims are indefinite because they depend on indefinite claims.

46, 50, 51, 52

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-12, 16-34, 36-39, 41-44, 46-52 and 75-80 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP/480,678.

EP 480,678 teaches in the abstract, page 3, lines 42-44 and the examples, a fused alumina zirconia abrasive which contains 0.05-7% of stabilizer (magnesia, yttria and other rare earth oxides). The abrasive is produced by melting the constituents and cooling to form a fused product.

The reference teaches a fused abrasive material comprising alumina, yttria and zirconia and it is the examiners position that since the same materials are used to form the product, the product of the reference will contain the claimed eutectic phases in the absence of any evidence showing the contrary. With respect to the colonies of the claimed abrasive, it is the examiner position that in the absence of any evidence showing the contrary, the reference material will contain colonies which meet the claimed invention. This is a characteristic of the product and since the product appears to be the same, the same characteristic is expected. The same reasoning above is apparent for the hardness of the claimed abrasive. With respect to the grade (claims 75-80), it is the examiners position that the particles of the reference will meet this

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requirement in the absence of any evidence showing the contrary. Finally, the reference teaches a method which reads on the claimed method and therefore no distinction is seen to exist.

Claims 53-59, 61-67 and 69-74 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 480,678 in view of Brothers et al. (4,035,162).

Brothers et al. teach in the abstract and column 3, lines 8-50 that alumina/zirconia fused abrasive grains are known to be used as abrasives in the manufacture of bonded abrasives (vitrified bond) and coated abrasives.

It is the examiners position that one skilled in the art would have known that the abrasives according to the primary reference can be used to make bonded abrasive articles and coated abrasive articles because Brothers et al. teach that the use of fused abrasives in these articles is well know. In view of this, the manufacture of coated abrasive articles and bonded abrasive articles from the abrasive particles defined by the primary reference are obvious to one skilled in the art. With respect to the abrading method, this is a conventional method of abrading using coated abrasive articles or bonded abrasive articles and therefore said method is obvious to the skilled artisan.

Claims 1-9, 11, 16-20, 22-26, 28-32, 34-60 and 69-80 are rejected under 35 U.S.C. 103(a) as being unpatentable over Poon et al. (4,457,767).

Poon et al. teach in the entire patent, a fused alumina zirconia abrasive which contains 1-2% yttria. The abrasive is produced by melting the constituents and cooling to form a fused product. The abrasive can be used to make coated abrasives and bonded abrasives.

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The reference teaches a fused abrasive material comprising alumina, yttria and zirconia and it is the examiners position that since the same materials are used to form the product, the product of the reference will contain the claimed eutectic phases in the absence of any evidence showing the contrary. With respect to the colonies of the claimed abrasive, it is the examiner position that in the absence of any evidence showing the contrary, the reference material will contain colonies which meet the claimed invention. This is a characteristic of the product and since the product appears to be the same, the same characteristic is expected. The same reasoning above is apparent for the hardness of the claimed abrasive. With respect to the grade (claims 75-80), it is the examiners position that the particles of the reference will meet this requirement in the absence of any evidence showing the contrary. Finally, the reference teaches a method which reads on the claimed method and therefore no distinction is seen to exist.

With respect to the abrasive articles, the reference states that bonded abrasives and coated abrasives can be made from these abrasive particles. With respect to the abrading method, this is a conventional method of abrading using coated abrasive articles or bonded abrasive articles and therefore said method is obvious to the skilled artisan.

Claims 61-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Poon et al. (4,457,767) in view of Brothers et al. (4,035,162).

It is the examiners position that one skilled in the art would have known that the abrasives according to the primary reference can be used to make vitrified bonded abrasive articles because Brothers et al. teach that the use of fused abrasives in this article is well know.

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In view of this, the manufacture of vitrified bonded abrasive articles from the abrasive particles defined by the primary reference is obvious to one skilled in the art.

Claims 1-4, 9-12, 16-19, 21-25, 27-31, 33-52 and 75-80 are rejected under 35

U.S.C. 103(a) as being unpatentable over Waku et al. (5,981,415).

Waku et al. teach in column 2, lines 40-55, column 5, line 18-column 7, line 63 and the claims, a fused ceramic material which can contain a numerous combination of oxide components (complex oxides). Fused ceramic materials based on alumina, zirconia and yttria are within the scope of the reference. The ceramic is produced by melting the constituents and cooling to form a fused product. The ceramic is known to be used as an abrasive material.

The reference teaches a fused ceramic material, that can be used as an abrasive, comprising alumina, yttria and zirconia and it is the examiners position that since the same materials are used to form the product, the product of the reference will contain the claimed eutectic phases in the absence of any evidence showing the contrary. With respect to the hardness, it is the examiner position that in the absence of any evidence showing the contrary, the reference material will have the claimed hardness, thus meet the claimed invention. This is a characteristic of the product and since the product appears to be the same, the same characteristic is expected. With respect to the grade (claims 75-80), it is the examiners position that the particles of the reference will meet this requirement in the absence of any evidence showing the contrary. Finally, the reference teaches a method which reads on the claimed method and therefore no distinction is seen to exist.

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Claims 53-74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Waku et al. (5,981,415) in view of Brothers et al. (4,035,162).

It is the examiners position that one skilled in the art would have known that the abrasives according to the primary reference can be used to make bonded abrasive articles and coated abrasive articles because Brothers et al. teach that the use of fused abrasives in these articles is well know. In view of this, the manufacture of coated abrasive articles and bonded abrasive articles from the abrasive particles defined by the primary reference is obvious to one skilled in the art. With respect to the abrading method, this is a conventional method of abrading using coated abrasive articles or bonded abrasive articles and therefore said method is obvious to the skilled artisan.

Claims 1-12, 16-52 and 75-80 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krohn et al. (4,595,663) alone or in view of Waku et al. (5,981,415).

Krohn et al. teach in the abstract, column 2, line 59-column 3, line 24 and the claims, a fused alumina zirconia ceramic which contains magnesia and/or yttria and/or ytterbium. The ceramic is produced by melting the constituents and cooling to form a fused product.

The reference teaches a fused ceramic material comprising alumina, yttria and zirconia and it is the examiners position that since the same materials are used to form the product, the product of the reference will contain the claimed eutectic phases in the absence of any evidence showing the contrary. With respect to the colonies of the claimed abrasive, it is the examiners position that in the absence of any evidence showing the contrary, the reference material will contain colonies which meet the claimed invention. This is a characteristic of the product and

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since the product appears to be the same, the same characteristic is expected. The same reasoning above is apparent for the hardness of the claimed abrasive. With respect to the grade (claims 75-80), it is the examiners position that the particles of the reference will meet this requirement in the absence of any evidence showing the contrary. Finally, the reference teaches a method which reads on the claimed method and therefore no distinction is seen to exist.

Although this reference does not literally define the fused material as an abrasive, applicant is claiming a "material" which the intended use does not carry any patentable weight in composition claims (see *In re Thuau* 57 USPQ 324 (CCPA 1942)). Any material possesses a property such that it may be used for a purpose. In the alternative, Waku et al. teaches that fused materials based on alumina, zirconia and yttria are known to be used as abrasive materials, thus making the use of the fused material according to the primary reference obvious as an abrasive material.

Claims 53-74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krohn et al. (4,595,663) in view of Waku et al. (5,981,415) and further in view of Brothers et al. (4,035,162).

As defined above, the fused material according to Krohn et al. is obvious as an abrasive material because Waku et al. teaches that fused materials based on alumina, zirconia and yttria are known to be used as abrasive materials (thus making the use of the fused material according to this reference obvious as an abrasive material). With this being obvious, it is the examiners position that one skilled in the art would have known that the abrasives according to Krohn et al. in view of Waku et al. can be used to make bonded abrasive articles and coated abrasive articles because Brothers et al. teach that the use of fused abrasives in these articles is well know. In

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view of this, the manufacture of coated abrasive articles and bonded abrasive articles from the abrasive particles defined by the primary reference is obvious to one skilled in the art. With respect to the abrading method, this is a conventional method of abrading using coated abrasive articles or bonded abrasive articles and therefore said method is obvious to the skilled artisan.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-80 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over all the claims of the following 9 applications (1) 09/772,730, (2) 09/618,879, (3) 09/619,106, (4) 09/619,289, (5) 09/704,843, (6) 09/619,215, (7) 09/619,729, (8) 09/620,262 and (9) 09/619,192. Although the conflicting claims are not identical, they are not patentably distinct from each other because the reduction to practice of the claims according to the copending applications would render obvious the instant claims. All the copending applications teach fused abrasive particles having all of the claimed components (alumina, yttria and zirconia) and it is the examiners that these components will form the claimed eutectics in the absence of any evidence showing the contrary. Although other

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components might be present in the copending applications, the instant claims use "comprising" which opens the claims to said additional components.

Although application serial numbers 09/619,106, 09/619,215 and 09/619,192 might not teach the abrasive articles and method of abrading, the instant claims are still obvious over the copending claims because fused abrasives are generally known to be made into these articles.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

In view of the teachings as set forth above, it is the examiners position that the references reasonably teach or suggest the limitations of the rejected claims.

"A reference is good not only for what it teaches but also for what one of ordinary skill might reasonably infer from the teachings. *In re Opprecht* 12 USPQ 2d 1235, 1236 (CAFC 1989); *In re Bode* USPQ 12; *In re Lamberti* 192 USPQ 278; *In re Bozek* 163 USPQ 545, 549 (CCPA 1969); *In re Van Mater* 144 USPQ 421; *In re Jacoby* 135 USPQ 317; *In re LeGrice* 133 USPQ 365; *In re Preda* 159 USPQ 342 (CCPA 1968)". In addition, "A reference can be used for all it realistically teaches and is not limited to the disclosure in its preferred embodiments" See *In re Van Marter*, 144 USPQ 421.

"A generic disclosure renders a claimed species prima facie obvious. *Ex parte George* 21 USPQ 2d 1057, 1060 (BPAI 1991); *In re Woodruff* 16 USPQ 2d 1934; *Merk & Co. v. Biocraft Lab. Inc.* 10 USPQ 2d 1843 (Fed. Cir. 1983); *In re Susi* 169 USPQ 423 (CCPA 1971)".

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Evidence of unexpected results must be clear and convincing. *In re Lohr* 137 USPQ 548.

Evidence of unexpected results must be commensurate in scope with the subject matter claimed.

In re Linder 173 USPQ 356.

The additional references cited on the 1449 have been reviewed by the examiner and are considered to be art of interest since they are cumulative to or less than the art relied upon in the above rejections.

Any foreign language documents submitted by applicant has been considered to the extent of the short explanation of significance, English abstract or English equivalent, if appropriate.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Marcheschi whose telephone number is (703) 308-3815. The examiner can be normally be reached on Monday through Thursday between the hours of 8:30-6:00 and every other Friday between the hours of 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiners supervisor, Mark L. Bell, can be reached at (703) 308-3823.

Amendments can also be sent by fax to the numbers set forth below:

For after final amendments, the fax number is (703) 872-9311;

For non-final amendments, the fax number is 703 872-9310.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0661.

Michael Marcheschi

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8/01


MICHAEL MARCHESCHI
PRIMARY EXAMINER